## Reflecting Objects

The Geoboard App allows you to rotate, reflect, and translate the objects you've created electronically. This activity takes you through the process of reflecting a scalene triangle.

Before you begin, you will need the Geoboard App loaded on your TI-73 Explorer ${ }^{\text {Tw }}$. Read the instructions and download the App from education.ti.com/apps

## Engage

1. Turn on yourTI-73 Explorer and press APPS
2. Scroll down to find GEOBOARD and press ENTER
3. Press any key to go through the beginning screen
4. Draw a scalene triangle using a $6 \times 6$ board

## Explore

1. Press <DRAW> ( $Y=$ ) to begin drawing
2. Press <ADD> (Y) to start adding line segments
3. Use the arrow keys to move along the peg board
4. Press <ADD> ( $Y=$ ) each time you are ready to finish one line segment and begin another

## Reflecting Objects

## Extend

1. Press <QUIT> ( GRAPH) to view the Transformation menu
2. Press <TRFM> (WINDOW) and select 2 for 2: Reflect
3. The board reappears with the Reflect prompt
4. Use the arrow keys to indicate the object of reflection and press ENTER
5. Place the cursor on one of two points (anywhere on the peg board) that will form either a vertical or horizontal line and press ENTER
6. Move the cursor to the second point (make sure you have created a vertical or horizontal line) and press ENTER
7. The temporary copy will be reflected across this line

8 Press <MOVE> ( $\because$ ) to replace the original object with the new, or <COPY> (WINDOW) to keep both objects
9. Press <OPTN> (GRAPH). Then select 1 1:MainMenu and follow the screens to exit the App

Note: If you draw an object that is too large, it cannot be reflected. If you choose a line of reflection that causes some of the triangle to go off the board, it cannot be reflected.


